May 23, 2001

Ms. Magalie Roman Salas, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, DC 20554

Re: Establishment of Rules and Policies for the Satellite Digital Audio Radio Service in the 2310 – 2360 MHz Band
***Ex Parte* Presentation - IB Docket No. 95-91**

Dear Ms. Salas:

Spike Broadband Systems Inc. ("Spike") opposes the licensing of high powered (up to 40 kW) terrestrial repeaters in the satellite Digital Audio Radio Service ("SDARS").

Spike was founded in 1995, and is a manufacturer of equipment in the WCS, ITFS, and MMDS bands, as well as the 3.3 to 3.7 GHz bands for foreign deployment. Spike's equipment is currently used to provide a wide variety of services in the United States and in many other countries. Through its development and deployment of proprietary transmission equipment and communications solutions over the past six years, Spike has gained the necessary knowledge and practical experience to state unequivocally that authorizing the operation of high-powered repeaters in the SDARS band would cause interference of such magnitude as to seriously undermine the viability of Wireless Communications Service ("WCS") networks.

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The SDARS interests do not even attempt to demonstrate how WCS services can realistically be protected from interference from high power repeaters. Instead, they attempt to duck the interference issue by shifting the focus to the capabilities of current WCS equipment. For example, Sirius Satellite Radio Inc. ("Sirius") in its *ex parte* letter to the Commission of April 23, 2001, faults the manufacturers of WCS equipment for building receivers with *no* protection against overload, *no* front-end selectivity, and *no* filtering to eliminate DARS transmissions in the 2320 – 2345 MHz band. In fact, nothing could be further from the truth.

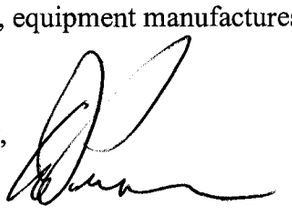
For example, Spike's current line of WCS equipment, as well as the next generation of WCS equipment Spike is developing, are designed to meet or exceed all of the FCC's service rules governing WCS transmissions. Spike's front-end overload specification is -35dbm at the 1db compression point, and Spike currently incorporates Intermediate Frequency (IF) filtering (using Surface Acoustical Wave technology) to achieve the stringent spectral mask requirements for the D- and C-block channels. Furthermore, Spike's equipment employs RF cavity filtering to protect against saturation at the front end of its receivers.

In truth, however, there are presently no filters capable of protecting WCS service in the face of terrestrial DARS repeaters operating at heretofore unheard of power levels up to and including 40 kW. Even if the development of such filters was possible from a technical standpoint, the cost of doing so likely would be prohibitive. Indeed, Spike estimates that these filters would add an incremental cost of approximately of $1500 per transceiver, *not* including the cost of development, which would be substantial. Such significant and unexpected costs would likely undermine WCS business models, and render WCS services economically unfeasible.

Moreover, the size of the new filters would make them unsuitable for most consumer applications. Cavity duplexer (or waveguide diplexer) filters would be required to achieve the necessary protection. Such filters would need to be approximately 12 inches by 12 inches by 6 inches in size, both at the head end and subscriber locations. The sheer size of such filters would require the redesign of base station equipment and cabinets. In fact, the filters would of necessity be larger than the actual subscriber transceiver units being produced today, which likely would be met with significant marketplace resistance. Current installations would have to be retrofitted, again at significant cost to WCS operators and consumers alike. In addition, critical services to the public would be interrupted, a result that the Commission has historically sought to avoid.

Spike considers the WCS service to be a critical component of its domestic market for broadband fixed wireless access equipment. The SDARS licensees' proposal to deploy high powered repeaters must be rejected as it would severely limit the development and viability of operations in the WCS band, to the detriment of WCS operators, equipment manufactures, and most importantly, the public.

Sincerely,



Tom Peragine
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Spike Broadband Systems, Inc.

cc:
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